# **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

# **Listing of Claims:**

- 1. (Canceled)
- 2. (Canceled)
- 3. (Currently Amended) A system for linking from physical or digital objects to corresponding digital resources, <u>the system comprising</u>:

a registration means configured to: for

receive receiving data relating to an object, wherein the data comprises an including its identity and an owner of the object; [[,]] and

<u>associate the data associating same</u> in a database with data relating to a corresponding response;

an originating device means configured to:

sense for sensing data from an input object;[[,]]

process the data processing same,; and

forward the processed data forwarding same to a routing means;

a routing means configured to:

<u>process for processing</u> the processed data from the originating device means[[,]];

log logging information concerning the processed data from same,;

<u>identify</u> a product handler means to which at least certain of said the processed data should be forwarded — from among plural different product handler means[[,]]; and

forward forwarding the at least certain of said the processed data to said the identified product handler means; and

<u>a</u> product handler means <u>configured to provide</u> for providing a response to the originating device means in accordance with the information provided thereto by the routing means, <u>wherein</u> the product handler means <u>being</u> <u>is</u> distinct from the routing means.

- 4. (Currently Amended) The system of claim 3, wherein in which the routing means includes comprises means for checking information in the database.
- 5. (Currently Amended) The system of claim 3, wherein in which the registration means includes comprises means for generating an encapsulating file and means for distributing said the file to predetermined parties.

6.-16. (Canceled)

17. (Currently Amended) In a A method of linking from physical objects to corresponding electronic resources, the method including comprising:

sensing object payload data from a machine readable feature associated with a first physical object, using a hardware sensing device, wherein the first physical object is a member of a logical set;

querying a database with at least some of said the object payload data to obtain first address information associated with said the first physical object[[,]]; and

initiating an electronic link based on said obtained the first address information; an improvement comprising

foreseeing information about object payloads that may be forthcoming but that do

not share with the first object the payload data with which the database was queried[[,]]; and anticipatorily sending obtaining second address information associated with such foreseen object payloads after sending obtaining the first address information associated with the first physical object, wherein address information associated with other physical objects — but not associated with the first physical object — is sent obtained in expectation that such other physical objects may thereafter be sensed, and wherein said the second address is associated with a physical object that has not previously been sensed by said the hardware sensing device, and wherein the second address information is associated with other physical objects that are also members of the logical set.

# 18. (Canceled)

- 19. (Currently Amended) The method of claim [[18]] 17, wherein in which the logical set comprises a set of advertisements found in a particular magazine.
- 20. (Currently Amended) The method of claim 17, wherein the received that includes foreseeing an order in which other object payloads may be forthcoming, and anticipatorily sending second address information for such object payloads is in said an order.
- 21. (Currently Amended) The method of claim 20, wherein the in which said order is based on an order of printed pages in a bound volume.
- 22. (Currently Amended) The method of claim [[17]]20, wherein that includes determining an order in which to send second address information associated with said the order is foreseen object payloads based on a contractual arrangement.
  - 23. (Currently Amended) A method comprising: sensing a first an object identifier from a first object, using a hardware sensor device,

### wherein the first object is a member of a logical set;

sending said the first object identifier from a first device to a second device;

in response, receiving from said the second device, first address information corresponding to said the first object identifier;

initiating a link from the first device in accordance with said the first address information;

after receiving from the second device said the first address information, receiving from said the second device second address information corresponding to additional objects related to said the first object but that have not previously been sensed by said the hardware sensor device, wherein the second address information is associated with other physical objects that are also members of the logical set; and

storing said the second address information in a memory at the first device;

wherein, if an object included among said the identified additional objects is sensed by the hardware sensor device, the corresponding second address information can be retrieved from said the memory in the first device without the intervening delays of communicating with the second device.

24. (Currently Amended) In a A method of linking from physical objects to corresponding electronic resources, the method including comprising:

decoding object payload data sensed by a hardware sensing device from a machine readable feature associated with a physical object, wherein the physical object is a member of a logical set;

querying a database with at least some of said the payload data to obtain first address information associated with said the physical object; , and

initiating an electronic link based on said the obtained first address information; , an improvement comprising

foreseeing information about object payloads that may be forthcoming but that the hardware sensing device has not previously sensed;[[,]] and

anticipatorily <u>sending receiving</u> second address information associated with such foreseen object payloads after initiating <u>said</u> <u>the</u> electronic link, <u>wherein the second address information is associated with other physical objects that are also members of the logical set.</u>

#### 25. (Canceled)

- 26. (Currently Amended) The method of claim 25, wherein in which the logical set comprises a set of advertisements found in a particular magazine.
- 27. (Currently Amended) The method of claim 24, wherein the received that includes foreseeing an order in which other object payloads may be forthcoming, and anticipatorily sending second address information for such object payloads is in said an order.
- 28. (Currently Amended) The method of claim 27, wherein in which said the order is based on an order of printed pages in a bound volume.
- 29. (Currently Amended) The method of claim [[24]] 27, wherein the order is that includes determining an order in which to send second address information associated with said foreseen object payloads based on a contractual arrangement.
- 30. (Current Amended) In a A method of linking from physical objects to corresponding electronic resources, the method including comprising:

decoding object payload data sensed by a hardware sensing device from a machine readable feature associated with a physical object, wherein the physical object is a member of a logical set;

querying a database with at least some of said the payload data to obtain first address information associated with said the physical object, and :

initiating an electronic link based on said the obtained first address information; an improvement comprising

foreseeing information about object payloads that may be forthcoming but that the hardware sensing device has not previously sensed, and the an order in which said the other object payloads may be forthcoming;[[,]]and

anticipatorily <u>sending receiving</u> second address information associated with such foreseen object payloads, in such order, <u>wherein the second address information is associated</u> with other physical objects that are also members of the logical set.

- 31. (Currently Amended) The method of claim 30, wherein in which said the order is based on an order of printed pages in a bound volume.
- 32. (Currently Amended) A system for linking from physical or digital objects to corresponding digital resources, <u>the system comprising</u>:
  - a database;
  - a registration device configured to:

receive for receiving data relating to an object, wherein the data includes an including its identity and an associated owner of the object;[[,]] and

<u>associate</u> for associating same the data related to the object in the database with data relating to a corresponding digital resource;

a routing device <u>configured to:</u>

receive for (a) receiving data from a user device corresponding to an input object sensed thereby[[,]];

<u>log (b) logging</u> information concerning the received data[[,]];

<u>identify</u> (e) <u>identifying</u> a product handler device to which at least certain of <u>said</u> <u>the</u> processed data should be forwarded — from among plural different product handler devices[[,]]; and

forward (d) forwarding at least certain of said the received data to a product handler device; and

a product handler device <u>configured to for providing provide</u> a response to the user device, <u>said wherein the</u> response <u>being is</u> determined by reference to <u>said the</u> database in accordance with the data received from the user device.

33. (Currently Amended) The system of claim 32, further including comprising a user device configured to:

sense for sensing data corresponding to an input object[[,]];

process the data corresponding to the input object; processing same, and

<u>forward the forwarding</u> processed data to the routing <u>device part</u>, <u>said wherein the</u> user device <u>including comprises</u> a camera.

- 34. (Currently Amended) The system of claim 33, wherein the user device comprises a wireless telephone.
- 35. (Currently Amended) The system of claim 32, further comprising that further includes a steganographic watermark detector configured to decode for decoding information steganographically encoded in electronic or physical objects.
- 36. (Currently Amended) The system of claim 35, further including comprising a user device configured to:

sense for sensing data from an input object[[,]];

process the data from the input object; processing same, and

forward the processed data forwarding same to the routing device part, said wherein the user device including comprises the steganographic watermark decoder.

- 37. (Currently Amended) The system of claim 36, wherein the user device comprises a wireless telephone.
- 38. (Currently Amended) The system of claim 37, wherein the wireless telephone includes comprises a 2D image sensor.
- 39. (Currently Amended) The system of claim [[38]] <u>32, wherein in which</u> the routing device is <u>adapted configured</u> to check information in the database.
- 40. (Currently Amended) The system of claim 32, wherein in which the registration device is adapted configured to generate an encapsulating file and distribute said the file to predetermined parties.
- 41. (Currently Amended) The method of claim [[1]]17, wherein the sensing comprises sensing an object identifier from a first physical, tangible object, wherein the sensed identifier serves to identify said the physical, tangible object.
- 42. (Currently Amended) A method facilitating linking from physical objects to corresponding electronic resources, the method including:

at a second device, receiving, from a first device, first object payload data decoded from a first machine readable feature associated with a first physical object, wherein the first physical object is a member of a logical set;

querying a database with at least some of said the received first object payload data, to obtain first address information associated with said the first physical object;

transmitting said the first address information from the second device, so as to enable the first device to link to information associated with the first physical object;

anticipatorily transmitting other, second address information from the second device, wherein the second address information being is associated with a second physical object for which no object payload data has previously been received by the second device from the first device, so as to facilitate linking to information associated with the second physical object in ease the and wherein the second address information is associated with other physical objects that are also members of the logical set.

43. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a computing device, cause the computing device to perform operations comprising:

sensing object payload data from a machine readable feature associated with a first physical object, wherein the first physical object is a member of a logical set;

querying a database with at least some of the object payload data to obtain first address information associated with the first physical object;

initiating an electronic link based on the first address information;

foreseeing information about object payloads that may be forthcoming but that do not share with the first object the payload data with which the database was queried; and

anticipatorily obtaining second address information associated with such foreseen object payloads after obtaining the first address information associated with the first physical object, wherein address information associated with other physical objects — but not associated with the first physical object — is obtained in expectation that such other physical objects may thereafter be sensed, and wherein the second address is associated with a physical object that has not previously been sensed by the hardware sensing device, and wherein the second address information is associated with other physical objects that are also

members of the logical set.

44. (New) An apparatus comprising:

a processor; and

a memory operatively connected to the processor having instructions stored thereon that, if executed by the processor, cause the apparatus to:

sense object payload data from a machine readable feature associated with a first physical object, using a hardware sensing device, wherein the first physical object is a member of a logical set;

query a database with at least some of the object payload data to obtain first address information associated with the first physical object;

initiate an electronic link based on the first address information;

foresee information about object payloads that may be forthcoming but that do not share with the first object the payload data with which the database was queried; and

obtain second address information associated with such foreseen object payloads after obtaining the first address information associated with the first physical object, wherein address information associated with other physical objects — but not associated with the first physical object — is obtained in expectation that such other physical objects may thereafter be sensed, and wherein the second address is associated with a physical object that has not previously been sensed by the hardware sensing device, and wherein the second address information is associated with other physical objects that are also members of the logical set.

45. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a computing device, cause the computing device to perform operations comprising:

sensing a first object identifier from a first object, wherein the first object is a member of a logical set;

sending the first object identifier from a first device to a second device;

in response, receiving from the second device, first address information corresponding to the first object identifier;

initiating a link from the first device in accordance with the first address information;

after receiving from the second device the first address information, receiving from the second device second address information corresponding to additional objects related to the first object but that have not previously been sensed by the hardware sensor device, wherein the second address information is associated with other physical objects that are also members of the logical set; and

storing the second address information in a memory at the first device;

wherein, if an object included among the identified additional objects is sensed by the hardware sensor device, the corresponding second address information can be retrieved from the memory in the first device without the intervening delays of communicating with the second device.

- 46. (New) An apparatus comprising:
- a processor; and
- a memory operatively connected to the processor having instructions stored thereon that, if executed by the processor, cause the apparatus to:

sense a first object identifier from a first object, using a hardware sensor device, wherein the first object is a member of a logical set;

send the first object identifier from a first device to a second device;

receive from the second device, first address information corresponding to the first object identifier;

initiate a link from the first device in accordance with the first address information; receive from the second device, after receiving from the second device the first

address information, second address information corresponding to additional objects related to the first object but that have not previously been sensed by the hardware sensor device, wherein the second address information is associated with other physical objects that are also members of the logical set; and

store the second address information in a memory at the first device;

wherein, if an object included among the identified additional objects is sensed by the hardware sensor device, the corresponding second address information can be retrieved from the memory in the first device without the intervening delays of communicating with the second device.

47. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a computing device, cause the computing device to perform operations comprising:

decoding object payload data from a machine readable feature associated with a physical object, wherein the physical object is a member of a logical set;

querying a database with at least some of the payload data to obtain first address information associated with the physical object;

initiating an electronic link based on the obtained first address information;

foreseeing information about object payloads that may be forthcoming but that the hardware sensing device has not previously sensed; and

anticipatorily receiving second address information associated with such foreseen object payloads after initiating the electronic link, wherein the second address information is associated with other physical objects that are also members of the logical set.

48. (New) An apparatus comprising:

a processor; and

a memory operatively connected to the processor having instructions stored thereon that, if executed by the processor, cause the apparatus to:

decode object payload data sensed by a hardware sensing device from a machine readable feature associated with a physical object, wherein the physical object is a member of a logical set;

query a database with at least some of the payload data to obtain first address information associated with the physical object;

initiate an electronic link based on the obtained first address information;

foresee information about object payloads that may be forthcoming but that the hardware sensing device has not previously sensed; and

anticipatorily receive second address information associated with such foreseen object payloads after initiating the electronic link, wherein the second address information is associated with other physical objects that are also members of the logical set.

49. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a computing device, cause the computing device to perform operations comprising:

decoding object payload data from a machine readable feature associated with a physical object, wherein the physical object is a member of a logical set;

querying a database with at least some of the payload data to obtain first address information associated with the physical object;

initiating an electronic link based on the obtained first address information;

foreseeing information about object payloads that may be forthcoming but that the hardware sensing device has not previously sensed, and the order in which the other object payloads may be forthcoming; and

anticipatorily receiving second address information associated with such foreseen object payloads, in such order, wherein the second address information is associated with other physical objects that are also members of the logical set.

50. (New) An apparatus comprising:

a processor; and

a memory operatively connected to the processor having instructions stored thereon that, if executed by the processor, cause the apparatus to:

decode object payload data sensed by a hardware sensing device from a machine readable feature associated with a physical object, wherein the physical object is a member of a logical set;

query a database with at least some of the payload data to obtain first address information associated with the physical object;

initiate an electronic link based on the obtained first address information;

foresee information about object payloads that may be forthcoming but that the hardware sensing device has not previously sensed, and the order in which the other object payloads may be forthcoming; and

anticipatorily receive second address information associated with such foreseen object payloads, in such order, wherein the second address information is associated with other physical objects that are also members of the logical set.

51. (New) An article of manufacture including a computer-readable medium having instructions stored thereon that, if executed by a computing device, cause the computing device to perform operations comprising:

at a second device, receiving, from a first device, first object payload data decoded from a first machine readable feature associated with a first physical object, wherein the first physical object is a member of a logical set; querying a database with at least some of the received first object payload data, to obtain first address information associated with the first physical object;

transmitting the first address information from the second device, so as to enable the first device to link to information associated with the first physical object;

anticipatorily transmitting other, second address information from the second device, wherein the second address information is associated with a second physical object for which no object payload data has previously been received by the second device from the first device, and wherein the second physical object is a member of the logical set.

#### 52. (New) An apparatus comprising:

a processor; and

a memory operatively connected to the processor having instructions stored thereon that, if executed by the processor, cause the apparatus to:

receive, from a first device, first object payload data decoded from a first machine readable feature associated with a first physical object, wherein the first physical object is a member of a logical set;

query a database with at least some of the received first object payload data, to obtain first address information associated with the first physical object;

transmit the first address information from the second device, so as to enable the first device to link to information associated with the first physical object;

anticipatorily transmit other, second address information from the second device, wherein the second address information is associated with a second physical object for which no object payload data has previously been received by the second device from the first device, and wherein the second physical object is a member of the logical set.